

# Drug Abuse in Iowa

Evolving Issues & Emerging Trends

Iowa Office of Drug Control Policy September 2016

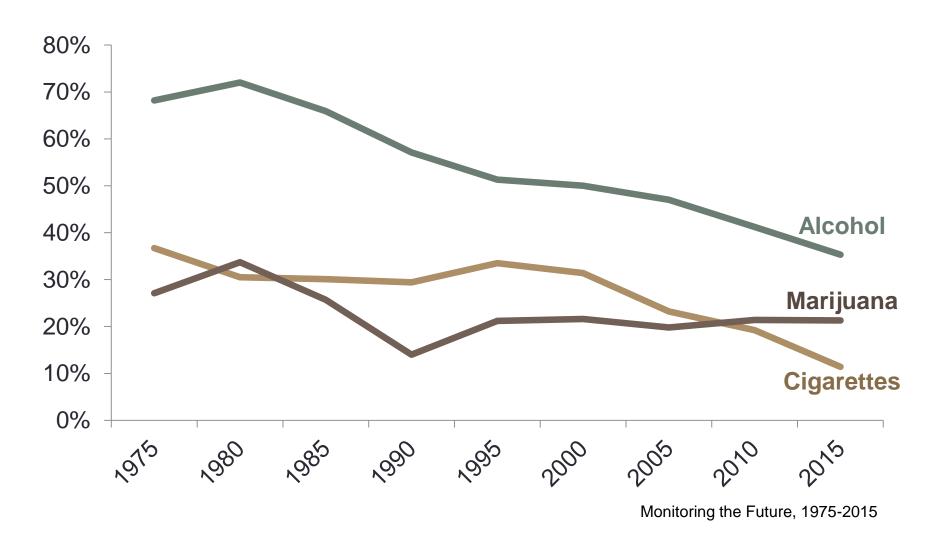
## Rapid Changes + Mixed Messages = ???s

Evolving Risks involving Medicines, Synthetics, Marijuana, etc.

- What's new (what is it, what's in it, what's it's effect)?
- Does it heal or hurt (medicine or menace)?
- Is it legal or illegal?
- What do we tell children (or anyone else) about it?
- How is it different now, compared to what I experienced?
- What do we know about it & when will we know more?
- What's next?

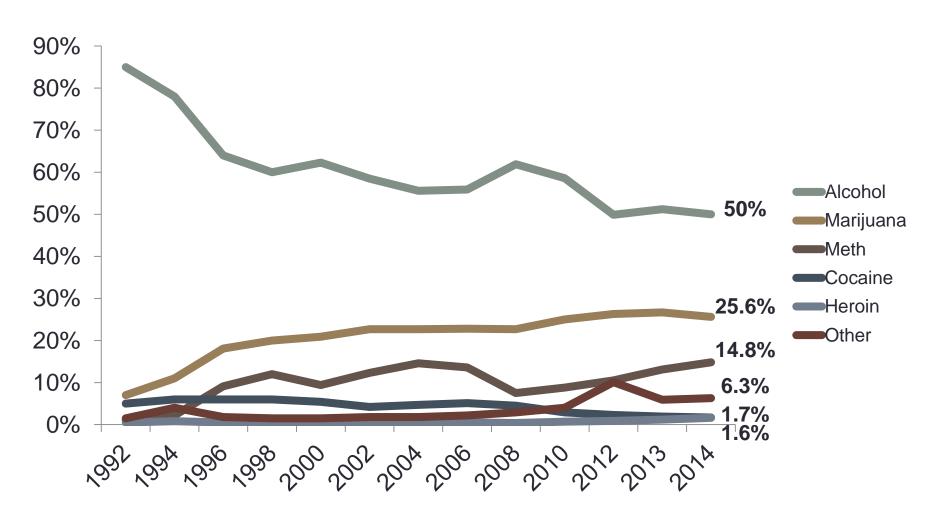
### Youth Substance Use 40-Year Trends

Current Use (past 30 days) Among U.S. 12th Graders



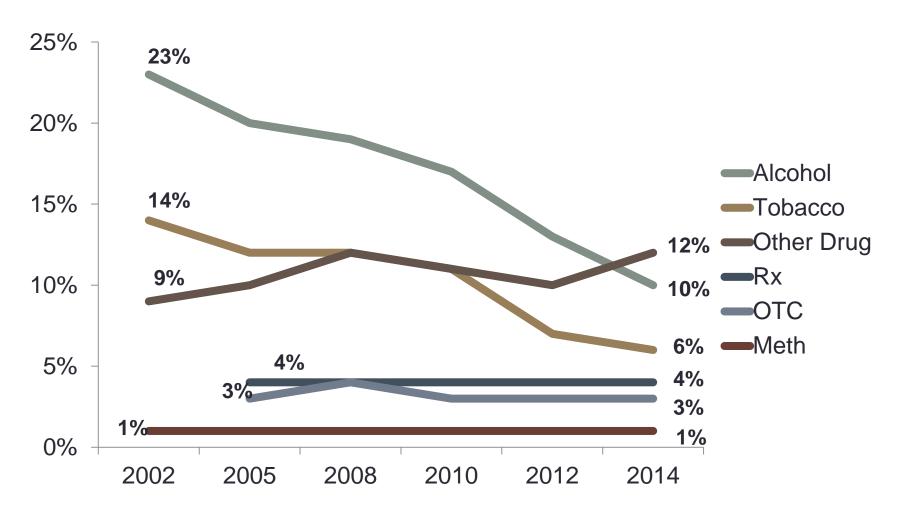
## Drugs of Choice: All Iowans

Primary Substance of Choice by Iowans in Treatment



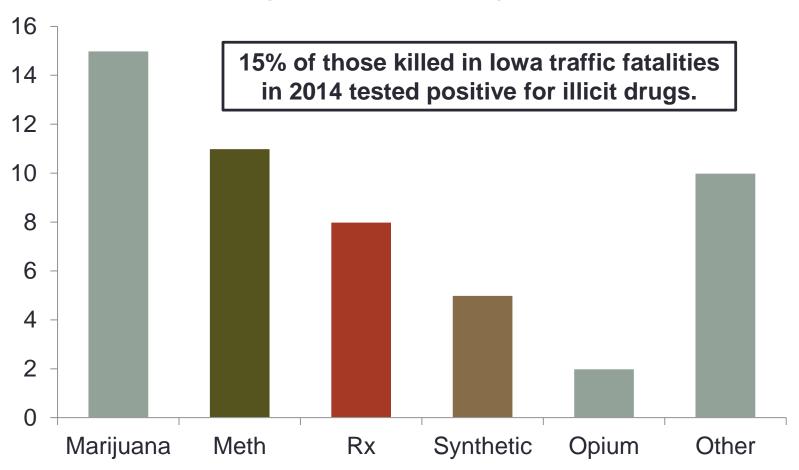
### Iowa Youth Substance Abuse

6<sup>th</sup>, 8<sup>th</sup> and 11<sup>th</sup> Grade Users, Last 30-Days



## Iowa Drug-Related Traffic Fatalities

Number Killed in 2014 Testing Positive for Illicit Drugs



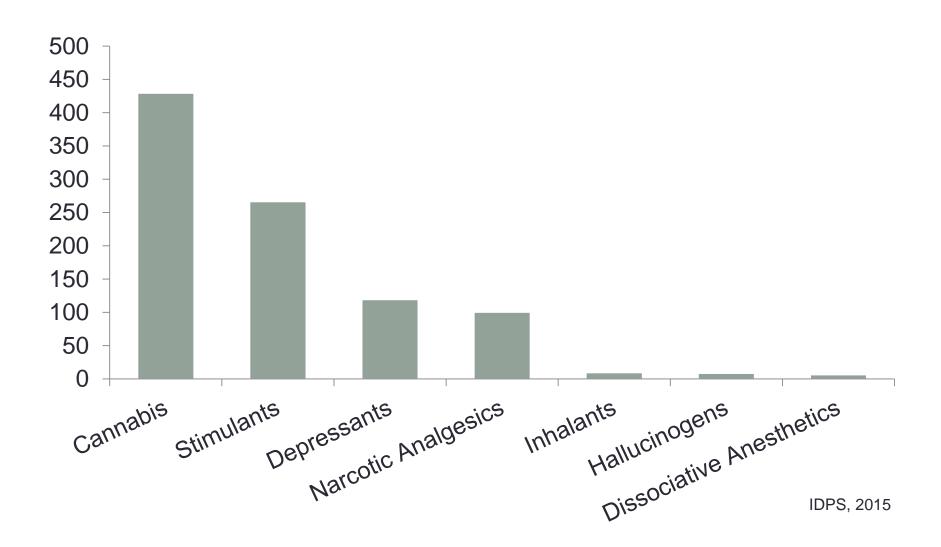
Does not include alcohol-related fatalities.

Alcohol & poly-drug combinations were detected in some crashes.

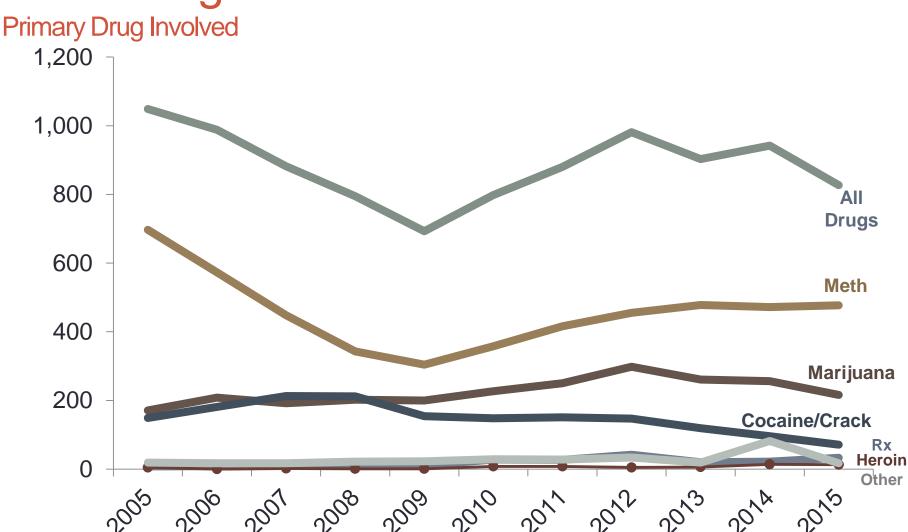
Source: IDOT, 2014

## **Iowa Drug-Impaired Driving**

2015 Non-Alcohol Evaluation Findings by Drug Recognition Experts

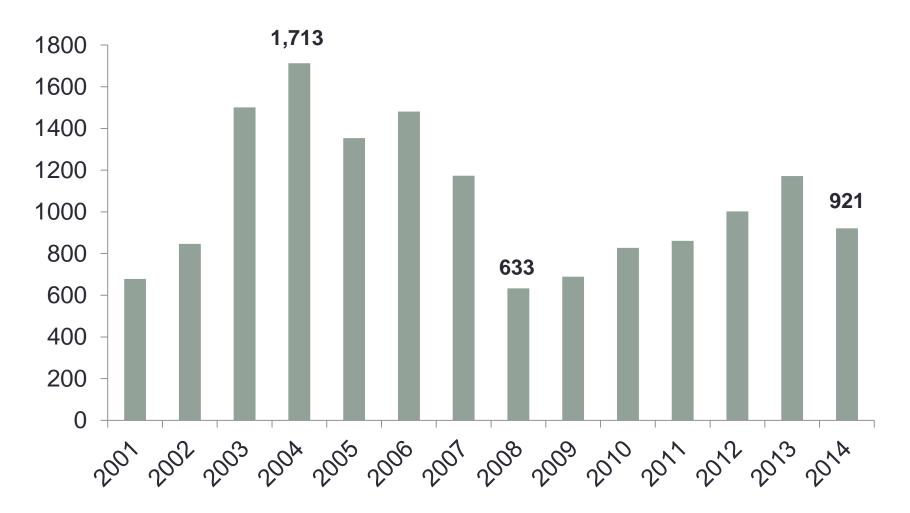


## Iowa "Drug-Related" Prison Admissions



## Iowa Drug-Related Child Abuse

Confirmed/Founded Cases: Illegal Drugs in a Child's Body



# Alcohol & Tobacco/Nicotine



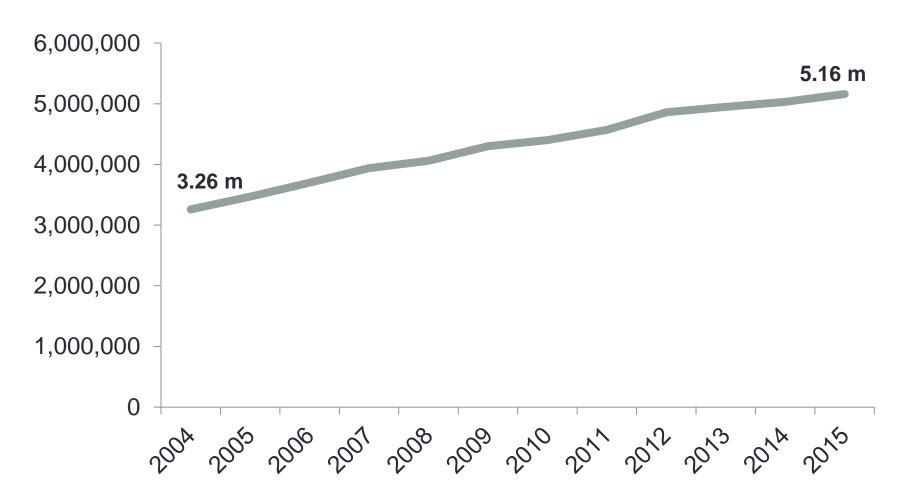






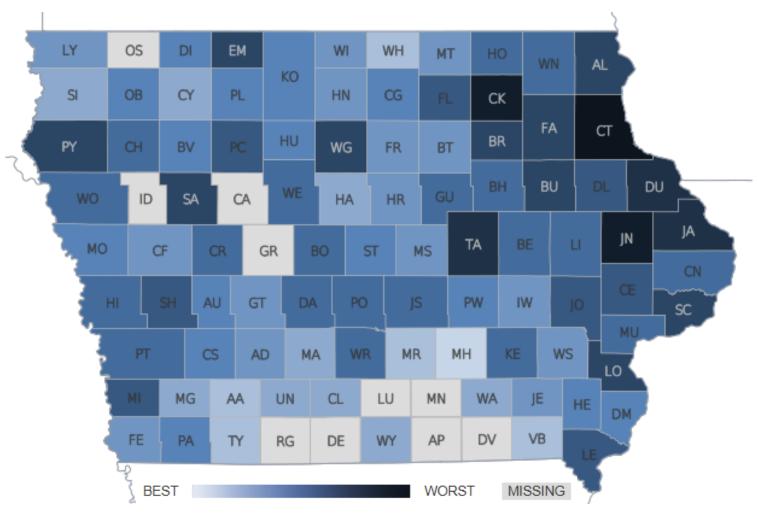
## Iowa Annual Distilled Spirits Sales

Millions of Gallons Sold to Adults

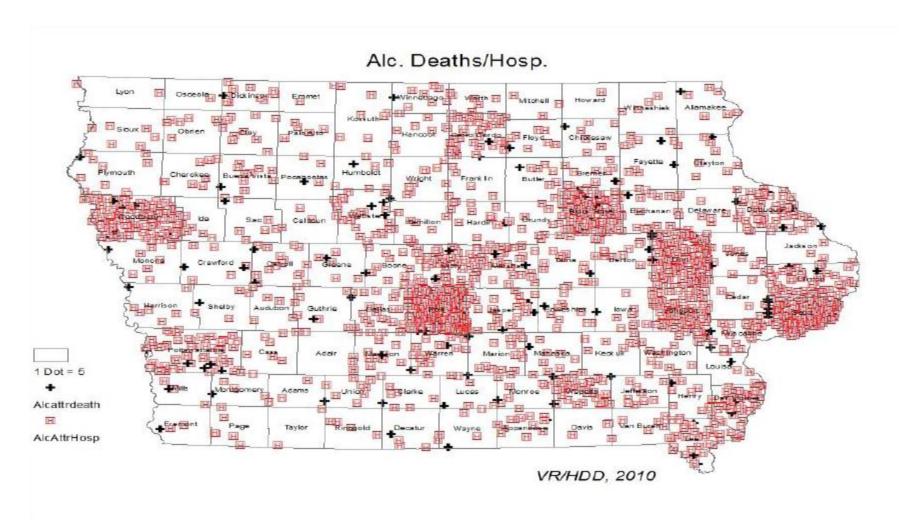


## **Excessive Drinking by Iowa Adults**

Percentage of Heavy or Binge Drinking by County

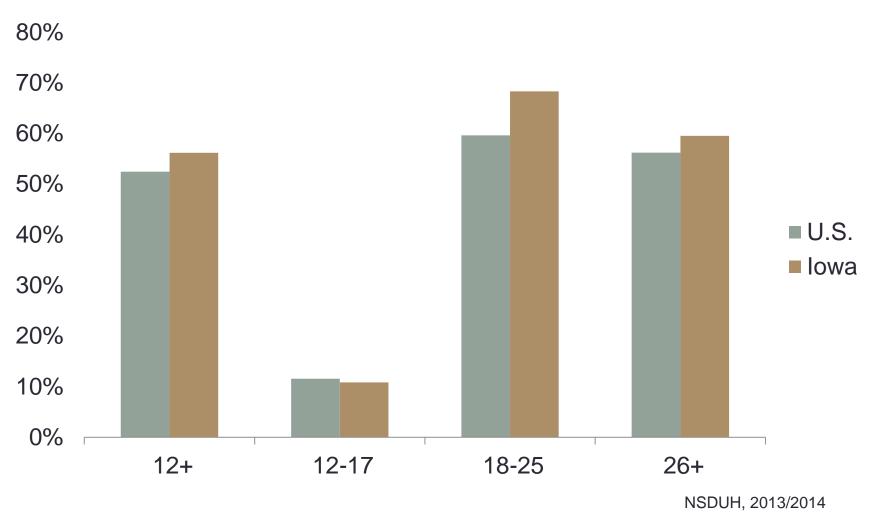


## Iowa Alcohol-Attributed Deaths & Hospitalizations



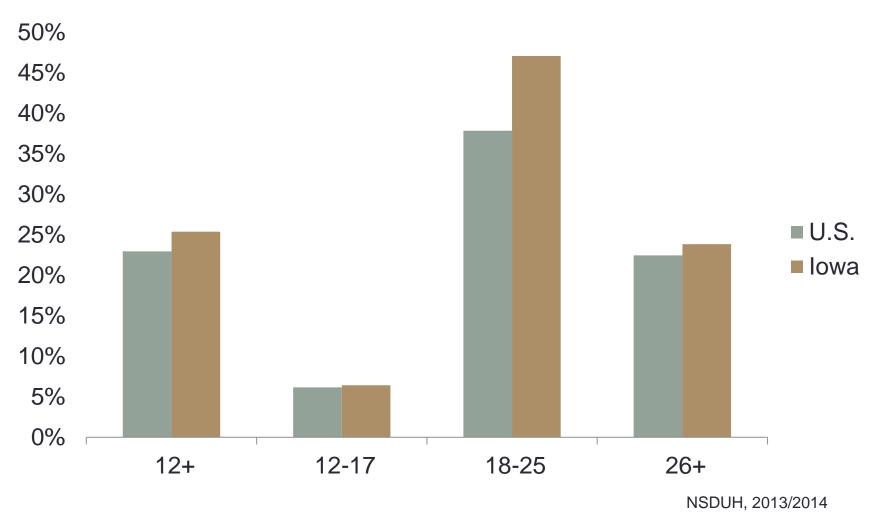
## **Current Alcohol Use**

#### Last 30-Days

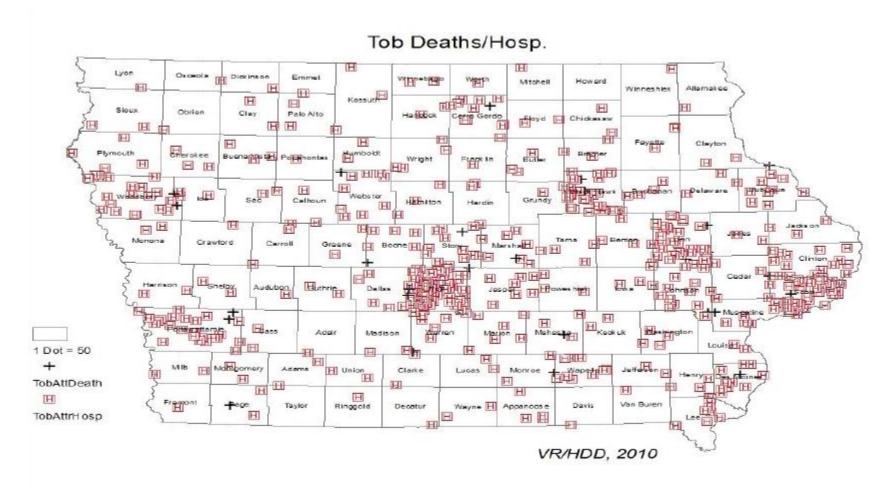


## **Current Binge Drinking**

#### Last 30-Days

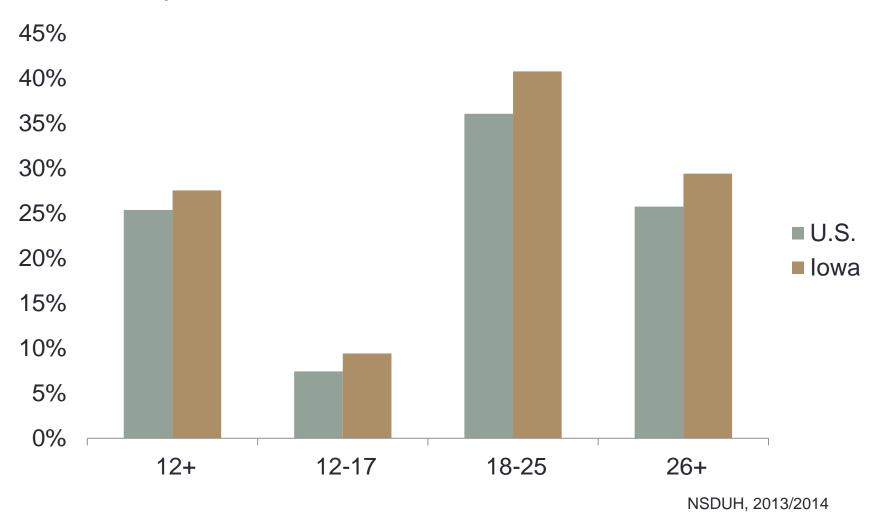


## Iowa Tobacco-Associated Deaths & Hospitalizations



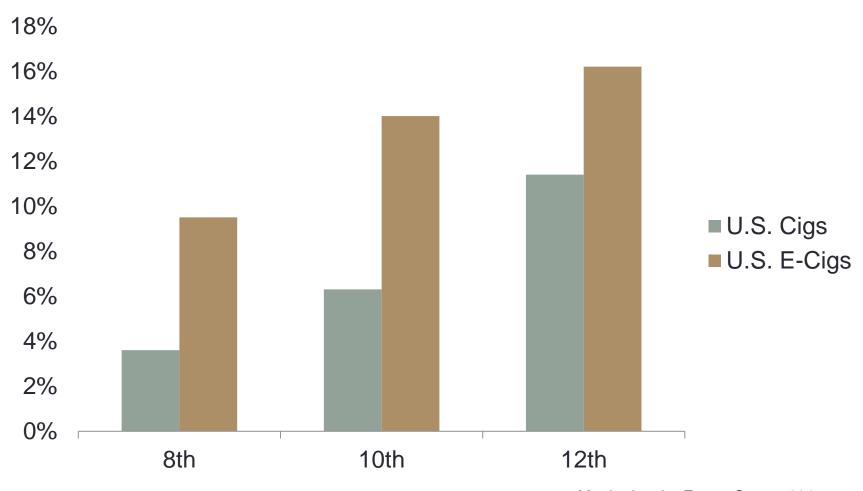
## **Current Tobacco Use**

#### Last 30-Days



# U.S. Youth Cigarette vs. E-Cigarette Use

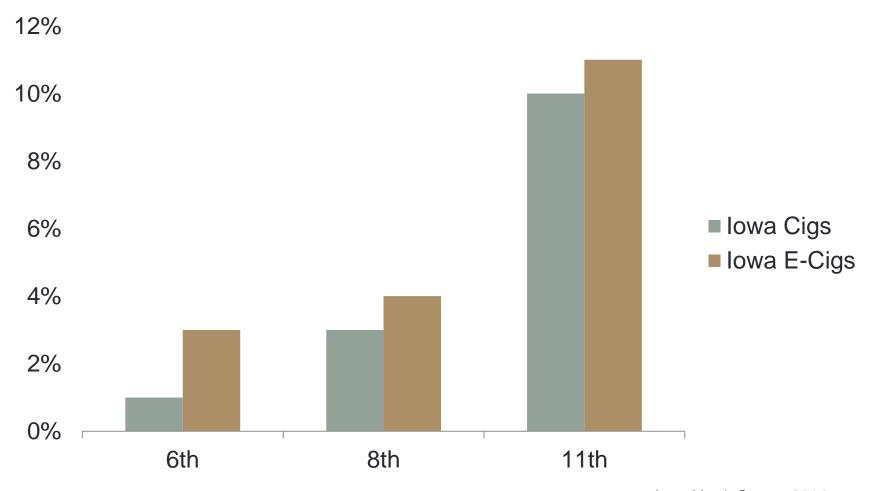
Last 30-Days



Monitoring the Future Survey 2015

## Iowa Youth Cigarette vs. E-Cigarette Use

Last 30-Days



Iowa Youth Survey 2014



# Marijuana

## Marijuana/Cannabis a.k.a.

#### Then

- Weed
- Grass
- Pot
- Reefer
- Hash
- Hemp
- Joints
- Blunts
- Buds

#### Now

- Hash or Honey Oil
- Wax or Earwax
- Budder
- Crumble
- Shatter
- Black Glass
- Edibles
- Reggie
- Loud

#### Distinction with a Difference

#### **Cannabis-Based Medicine:**

Cannabis derivatives that test safe & effective as research-based medicines for use by health care professionals in treating patients with valid medical needs, & regulated to reduce public safety risks.

#### **Medical Marijuana:**

Differing forms of cannabis approved by legislative or popular vote in some states for treating various health conditions, with fewer controls & safeguards than FDA-approved medicines.

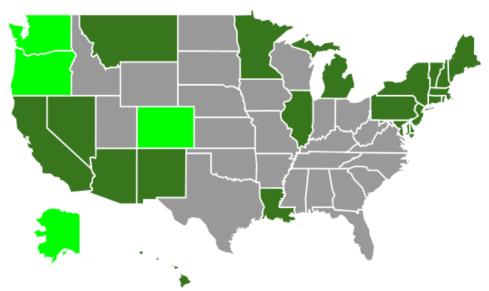
#### **lowa Law:**

Permits regulated use of limited quantities of CBD oil to treat qualified patients with intractable epilepsy.

# Marijuana Laws & Use by Teens by State

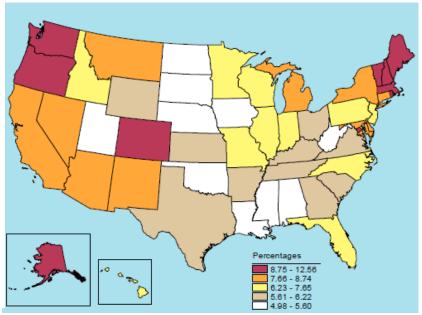
"Medical" & "Recreational" Marijuana Laws (2016 Governing.com)

Past Month Use by 12-17 Year Olds (2013-2014 NSDUH)





- Lime = "Medical" & "Recreational" marijuana (4).
- Not Shown: Low THC non-psychoactive "CBD" oils (18, including lowa, where the Pharmacy Board recommended in 2015 the Legislature consider rescheduling CBD only).



## Health Group Positions on Marijuana

 Major public health organizations (American Cancer Society, American Glaucoma Foundation, American Medical Association, American Psychiatric Association, National Pain Foundation, National Multiple Sclerosis Society, National Association of School Nurses, et al.) do not support smoked marijuana.









Multiple Sclerosis

Society



 The American Academy of Pediatrics "opposes marijuana use by children & adolescents...the use of 'medical' marijuana outside the regulatory process of the FDA...&...legalization of marijuana."

## Marijuana: R&D of **Derivatives**

#### Marinol (Dronabinol) & Cesamet (Nabilone):

FDA-approved synthetic cannabinoids—containing THC & CBD—legally available as prescription pills to treat cancer chemotherapy nausea & appetite loss.

#### Sativex (mouth spray):

A product with 2 cannabinoids extracted from the cannabis plant failed FDA-authorized tests for cancer pain, but may be tested on spasticity problems.

#### **Epidiolex (oral liquid):**

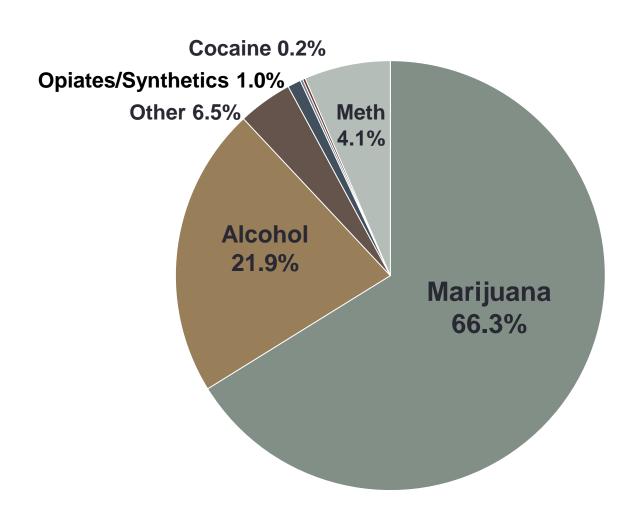
Contains the non-psychoactive cannabis extract Cannabidiol (CBD), & is an FDA orphan drug in a fast-track study to treat severe seizures. If all



goes well, an Rx product could be available by end of 2017?

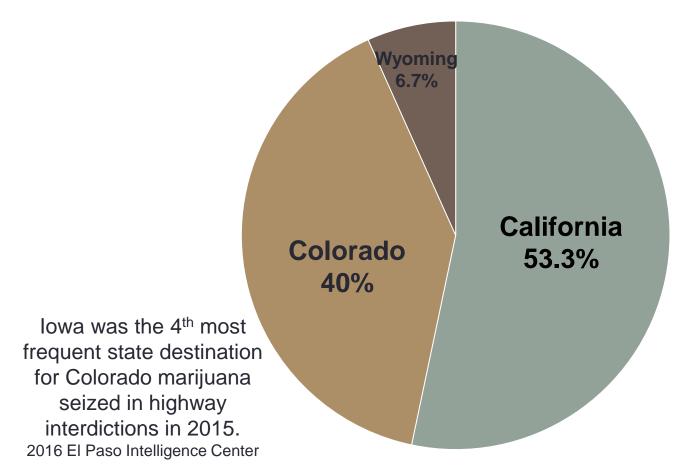
## Iowa Youth Drugs of Choice

Primary Substance by Juvenile Clients Entering Treatment



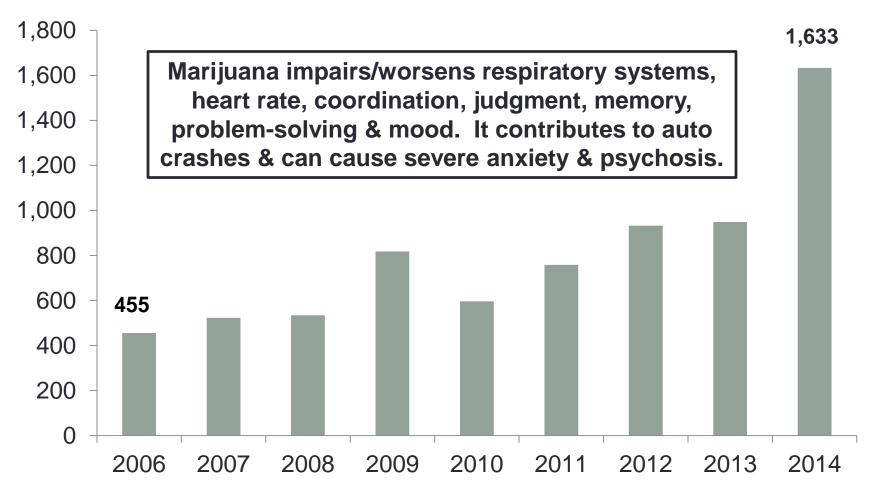
## Source of Marijuana Seized in Iowa

2015 Iowa State Patrol Significant Highway Interdictions



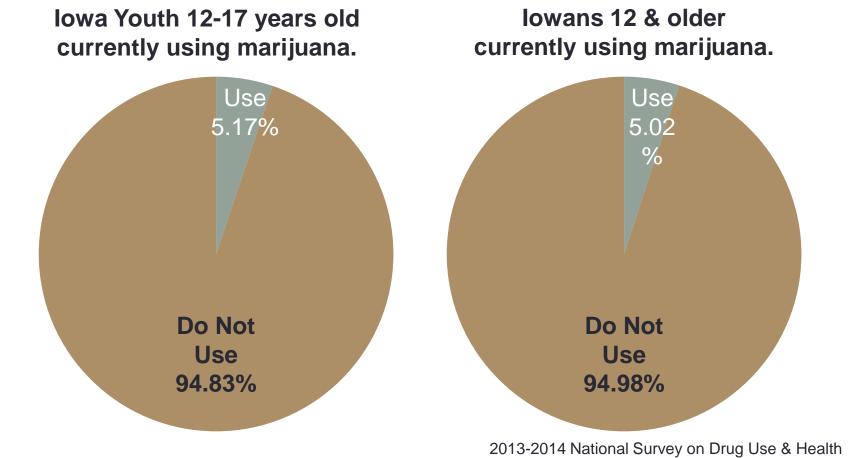
## Iowa Marijuana ER Visits

#### Cannabis Use as Causal or Contributing Factor



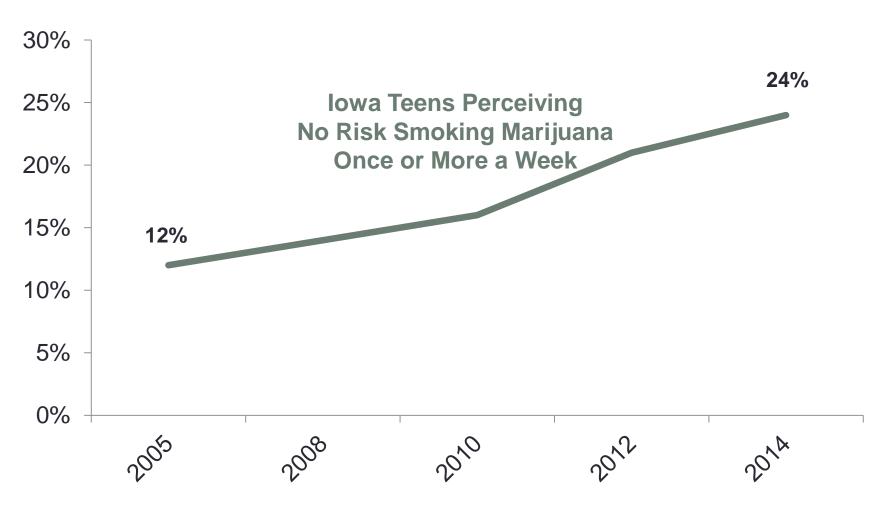
## Iowans' Current Marijuana Use

Most Iowans are not *current* marijuana users (past 30 days).



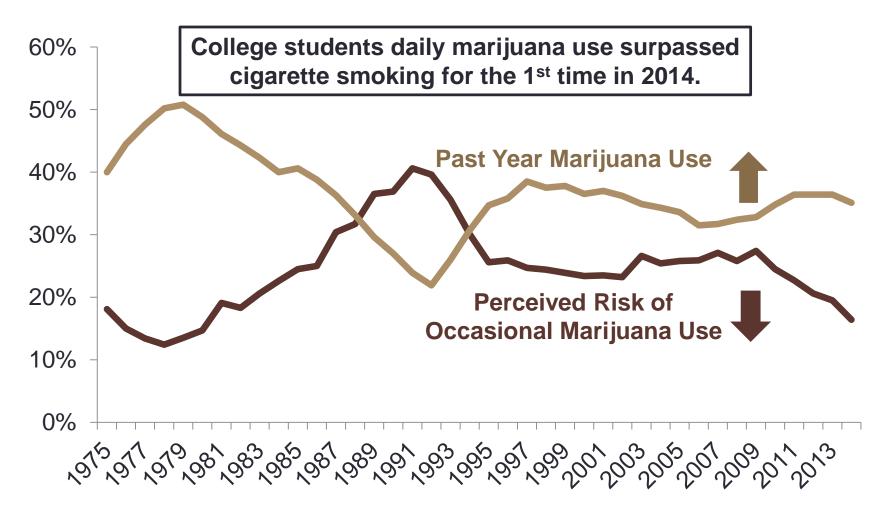
## Youth Marijuana Attitudes

Among Iowa 11th Graders



## Youth Marijuana Attitudes vs. Use

Among U.S. 12<sup>th</sup> Graders

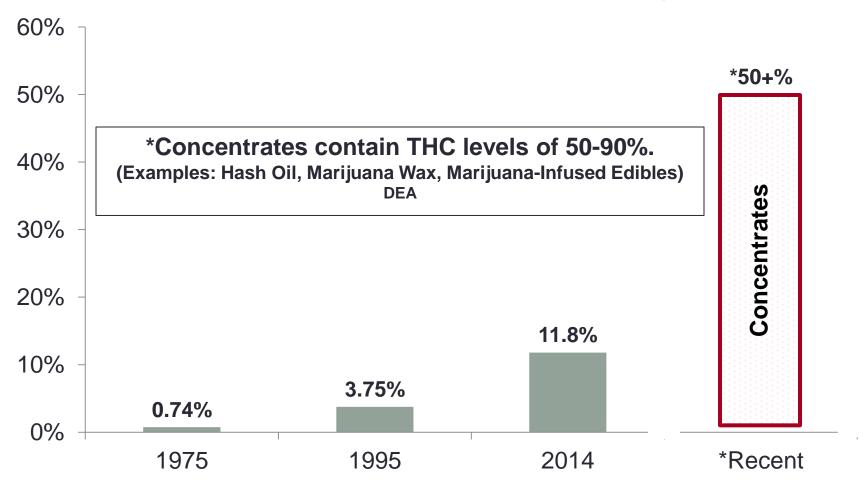


## Marijuana Matters

- About 9% of marijuana users become addicted. That number increases to 1 in 6 among users who start in adolescence, & to 25-50% among those who use daily.
   National Institute on Drug Abuse, NIH, Drug Facts
- Drug-related student suspensions & expulsions increased 40% in Colorado schools from 2008/2009-2013/2014.
   2015 Colorado Department of Education
- Persistent marijuana use during adolescence can cause a long-term 8-point drop in IQ, & harm attention span & memory.
   2012 National Academy of Sciences, Dunedin Study
- College student daily marijuana use surpassed cigarette smoking for the 1<sup>st</sup> time, increasing to 5.9%, the highest level since 1980. 2014 Monitoring the Future Survey/University of Michigan

## Marijuana's Increasing Potency

U.S. Seizures, Concentration of THC by % of Weight



Sources: University of Mississippi Marijuana Project, NIDA & DEA

#### Concentrates

Beyond the Plant...





## Concentrates

Beyond the Plant...



"Green Crack" wax



Hash Oil Capsules



"Ear Wax"

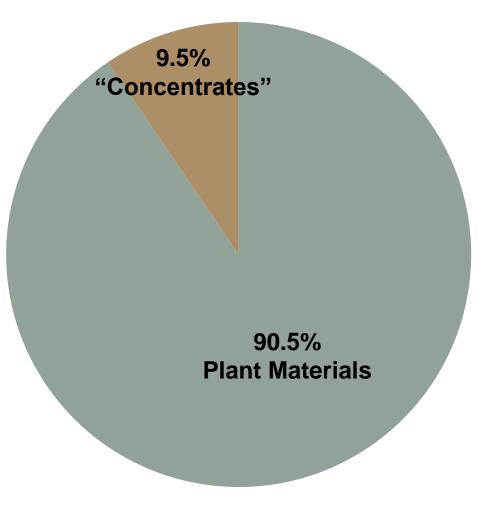






## New Marijuana in Iowa

Approximately 9.5% of all 2015 marijuana samples submitted to the lowa crime lab involved marijuana "preparations," or "concentrates" (e.g., hash oils, waxes & marijuana-infused edibles).



2015 Iowa Department of Public Safety, Division of Criminal Investigation

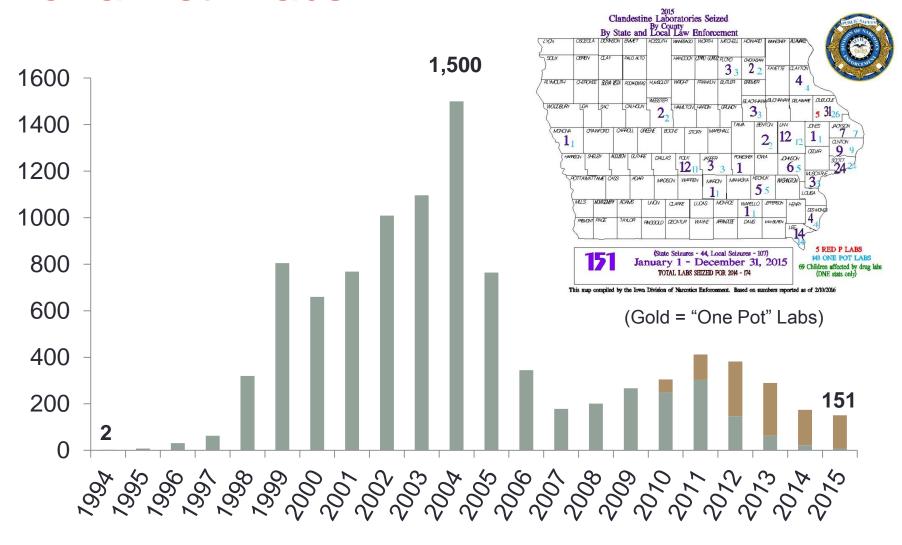
## Iowa Marijuana Policy

- Marijuana, or a substance with \*any amount of THC, is illegal as a Schedule I Controlled Substance in Iowa (similar to federal law).
- The 2014 Iowa Medical Cannabidiol Act (SF 2360) permits very limited use of CBD oils that are \*low in THC (<3%) to treat intractable epilepsy.
- 25 states & DC have voter approved or legislated "medical" marijuana; 4 states have voter approved "recreational" marijuana; & 18 states, including lowa, have CBD laws.
- Congress is considering proposals, including a Marijuana Effective Drug Studies (MEDS) Act to promote research on the medical effectiveness & safety of marijuana components.

## Meth



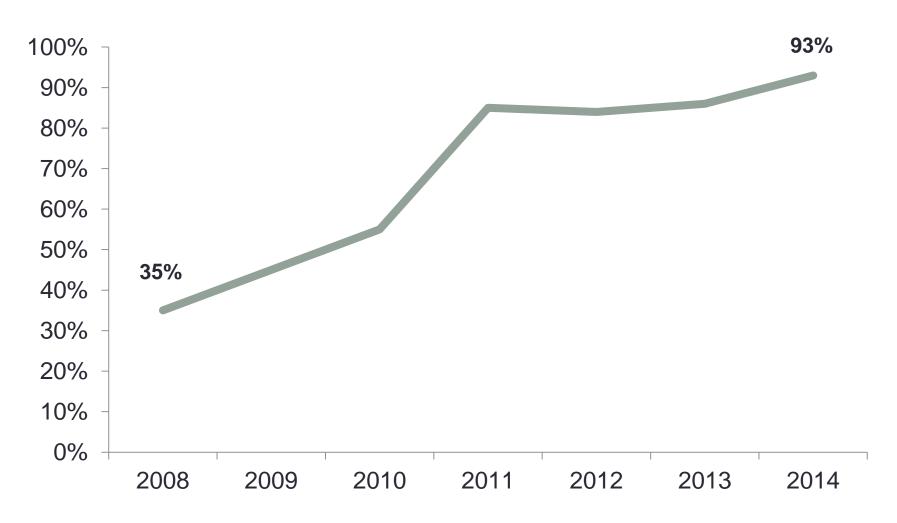
#### **Iowa Meth Labs**



Iowa Meth Labs Down 90% vs. Peak of 10 Years Ago. Source: IDPS, 2015

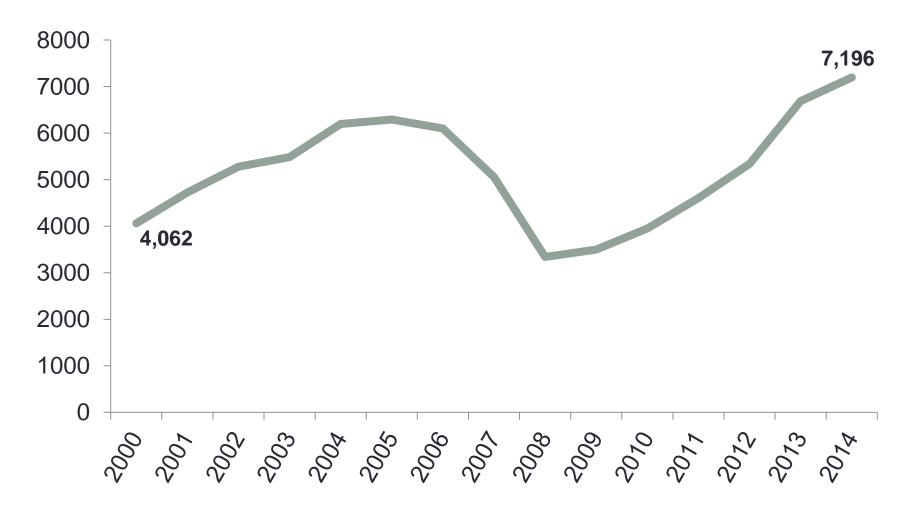
## **Iowa Meth Purity**

#### Crime Lab Fiscal Year Averages



Source: IDPS, 2014

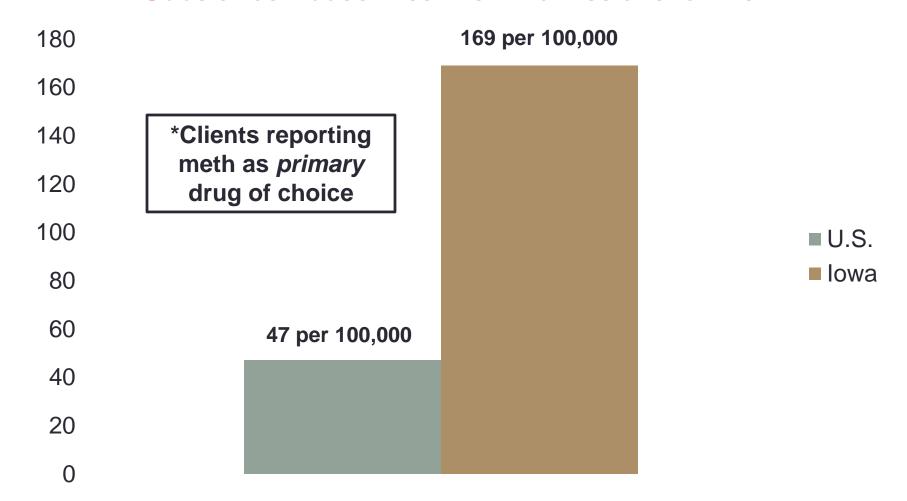
#### **Iowa Meth Treatment Admissions**



Source: IDPH, 2014

#### Rate of Meth Treatment

\*ALL 12+ Substance Abuse Treatment Admissions for Meth



Iowa Meth Use Treatment Rate 3<sup>rd</sup> Highest in US (& 8<sup>th</sup> Highest Number). Source: TEDS 2012

Opioid & Rx Abuse



## Types of Medicines Abused

- Opioids (\*Pain Relievers)
  - OxyContin®, Vicodin®, Percocet®



- Ritalin®, Adderall®, Sudafed®
- Anti-Anxieties
  - Xanax®, Valium®
- Anti-Depressants
   –Prozac®, Zoloft®
- Sedatives
  - Rohypnol®, Nembutal®, Seconal®
- Etc.
- \*Synthetic Opioid Examples: Oxycodone, Morphine, Methadone, Codeine, Fentanyl & Hydrocodone. Hydrocodone combination products became Schedule II Controlled Substances in October 2014.

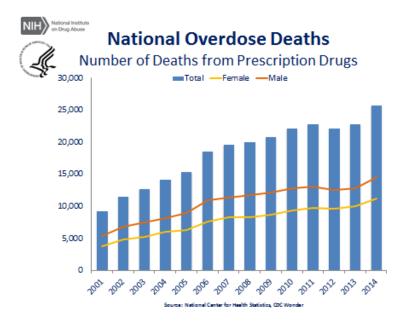






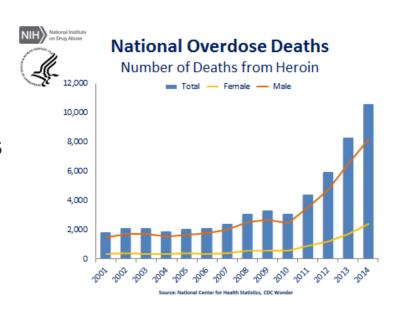


#### National Rx-Heroin Trends

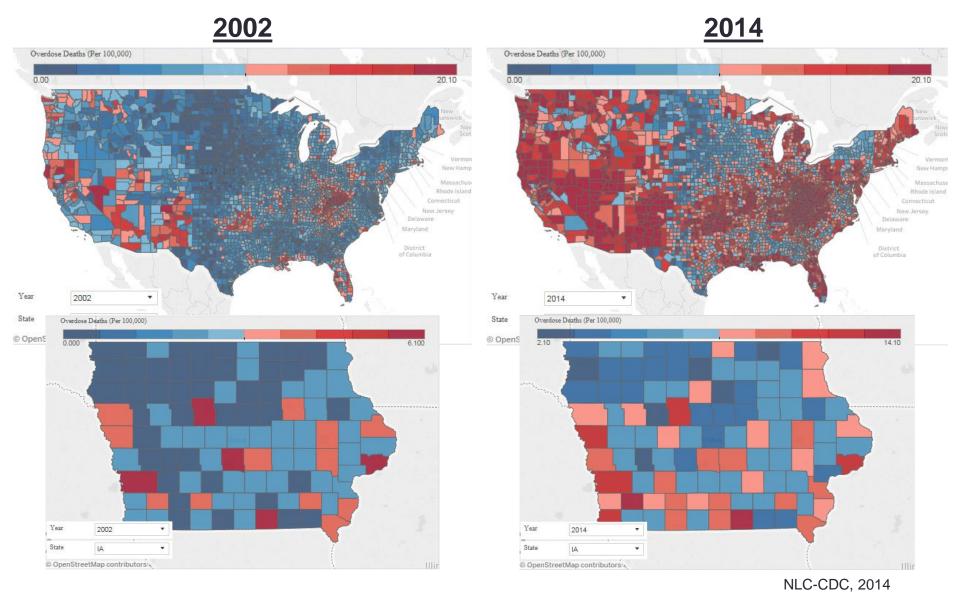


About 3 out of 4 new heroin users report previous Rx opioid abuse.

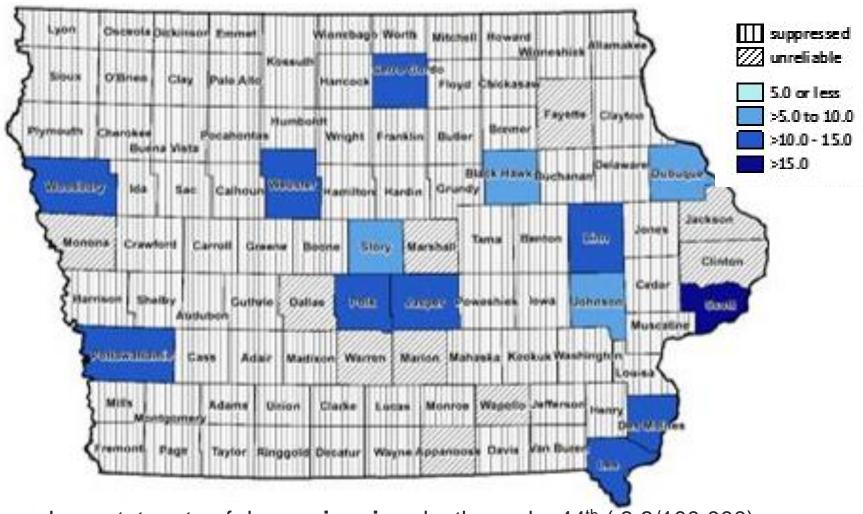
# Drug overdoses, led by opioids, claim 78 U.S. lives daily.



## Opioid OD Death Rates: 2002-2014

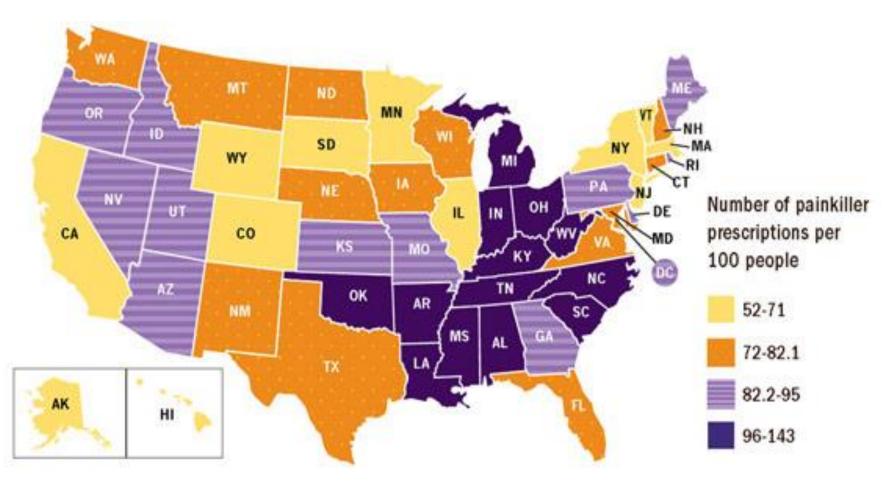


## Drug Poisoning Death Rate per 100,000



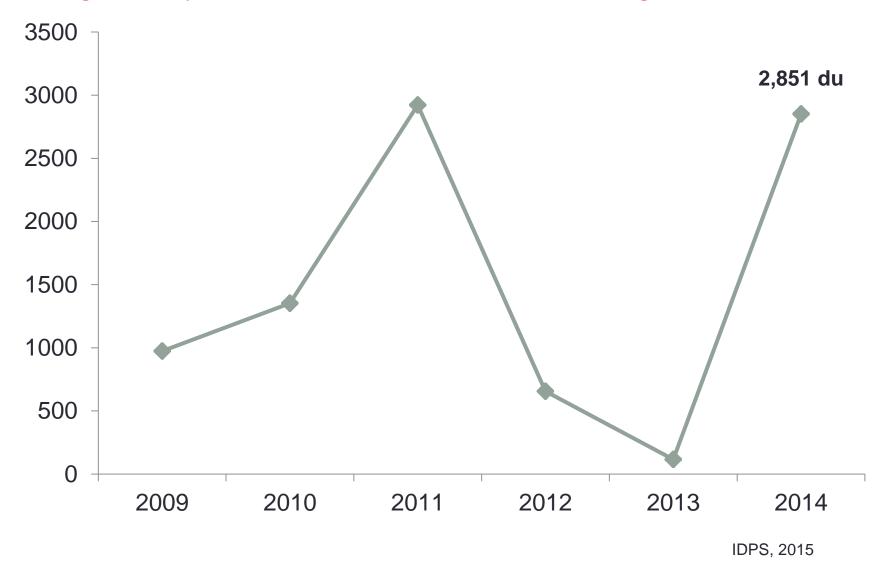
lowa state rate of drug **poisoning** deaths ranks 44<sup>th</sup> (8.8/100,000)

## Pain Reliever Prescriptions: By State



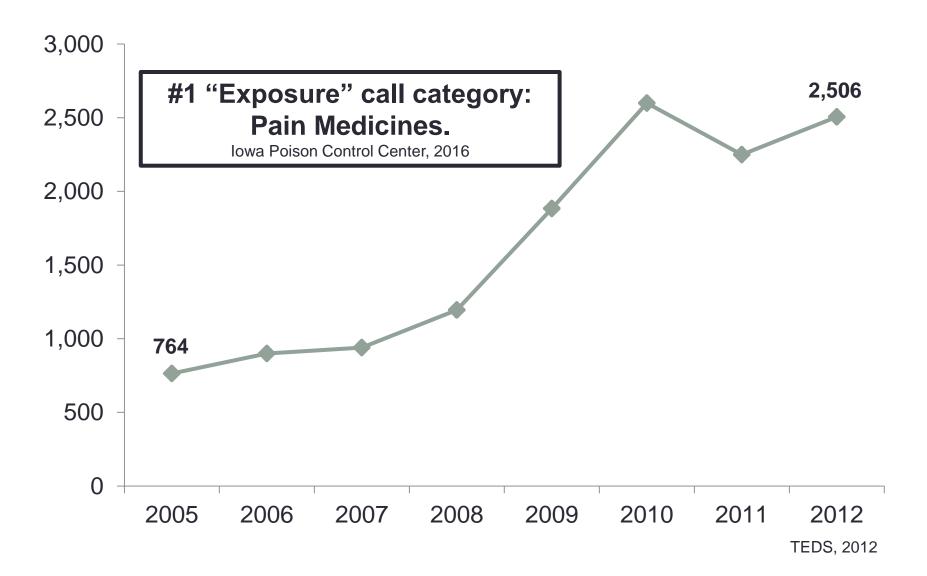
## Controlled Prescription Drug Seizures

In Dosage Units by Iowa Division of Narcotics Enforcement Agents



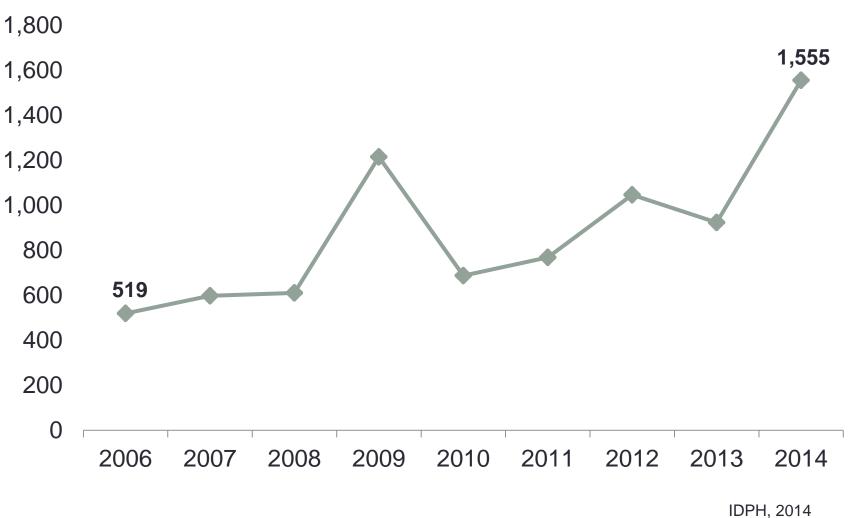
## Iowa Drug Treatment: Numbers

Any Abuse of Non-Heroin Opiates & Synthetics Reported at Admission

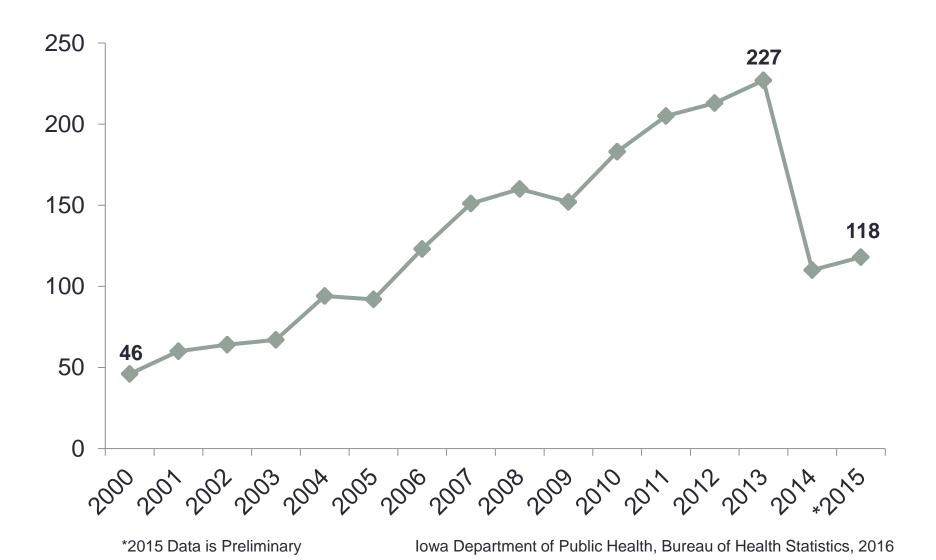


## Iowa Opioid-Related ER Visits

Opioid Use (including Opiates & Others) as Causal or Contributing Factor

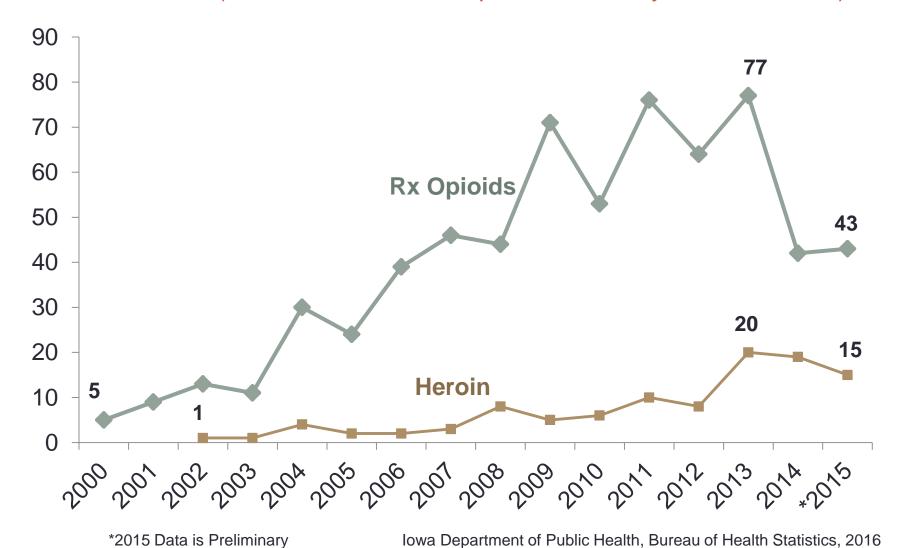


### Iowa Drug-Related OD Deaths: All Drugs



## Iowa Opioid-Related OD Deaths: Rx & Heroin

Rx = Pain Relievers (Rx Methadone, Other Opioids & Other Synthetic Narcotics)



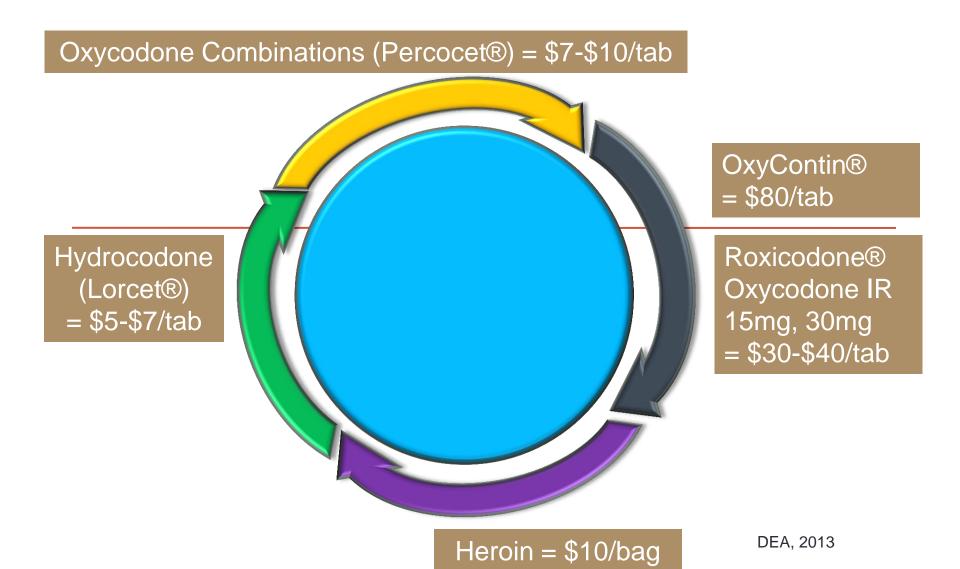


## Heroin

& Non-Medical
Synthetic Opioids
(e.g., fentanyl analogs)



#### Rx Pain Reliever-Heroin Connection



#### **Rx-Heroin Trends**

#### Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.

#### People who are addicted to...









2x

3x

15x

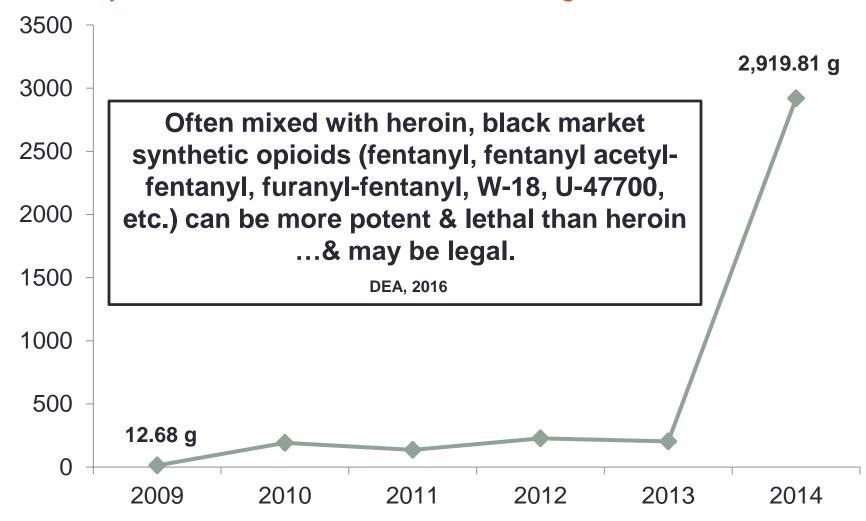
40x

...more likely to be addicted to heroin.

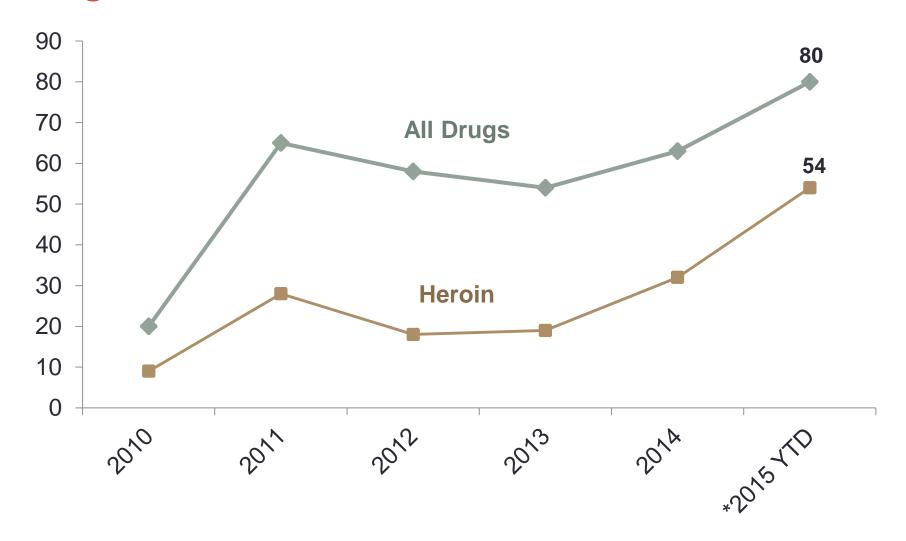
SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

#### Heroin Seizures

In Grams by Iowa Division of Narcotics Enforcement Agents

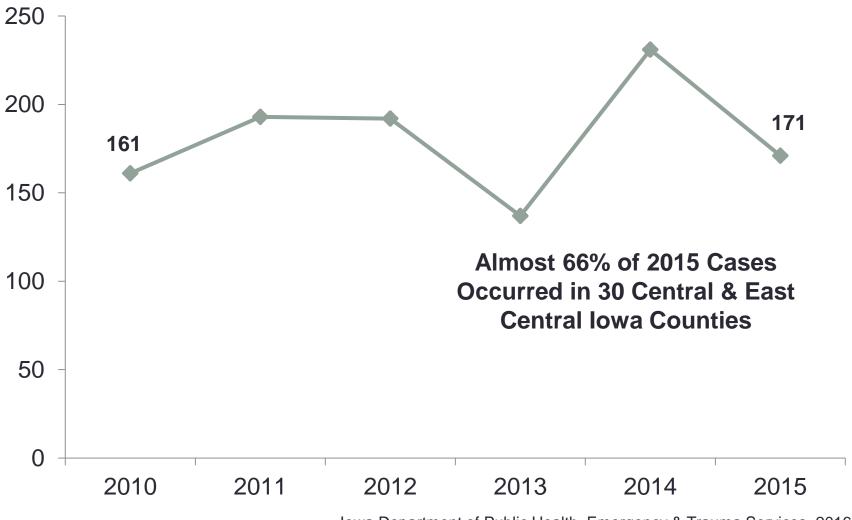


## Drug-Related OD Incidents: Cedar Rapids



## Naloxone Use by Iowa EMS Providers

# Times Administered



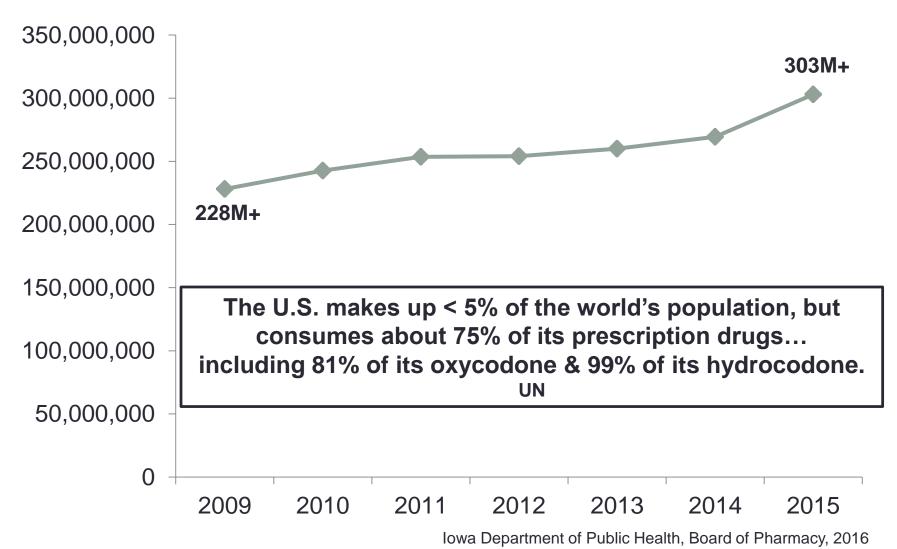
Iowa Department of Public Health, Emergency & Trauma Services, 2016

## Ease of Access & Perceptions of Safety

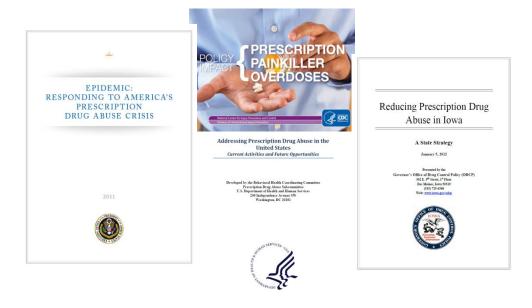


## Iowa PMP: Doses Dispensed

Controlled Prescription Drugs, Schedule II-IV



## Response to Reduce Rx Abuse: Iowa Plan



Education & Intervention
Secure Storage & Safe Disposal
Monitoring
Enforcement

#### \*\*NEW...lowa Laws to Reduce Opioid Abuse & Deaths:

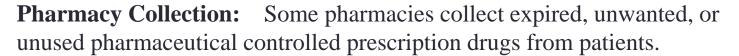
-SF 2218 & HF 2460 expand use of opioid overdose rescue drug Naloxone.
-SF 2102 allows Prescription Monitoring Program & EHR integration.

## Safe Medicine Disposal



**National Take-Back Events:** Special take-back events are a good way to remove expired, unwanted, or unused medicines from the home.

**Law Enforcement Collection:** A growing number of law enforcement agencies collect expired, unwanted, or unused pharmaceutical controlled prescription drugs on an ongoing basis via secure drop-off boxes.



**Disposal in Household Trash:** You may carefully mix medicines with substances such as kitty litter or used coffee grounds and place them in a container such as a sealed plastic bag to throw in your household trash.

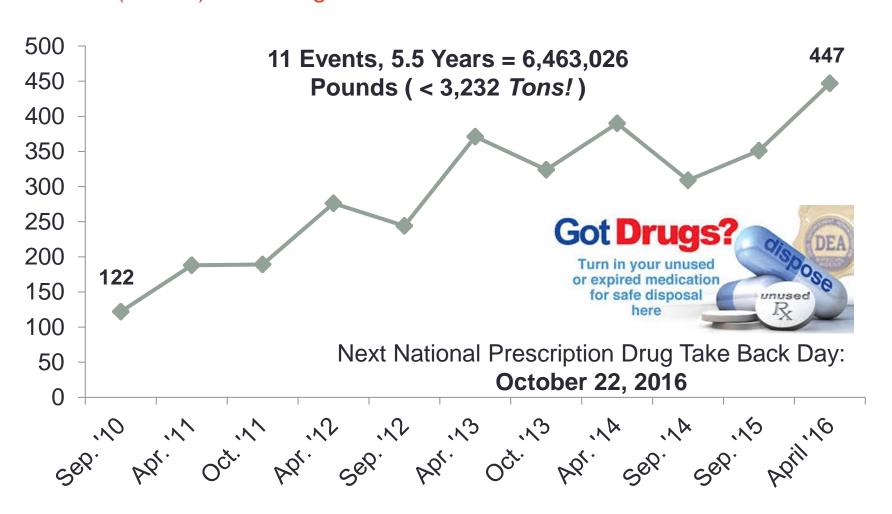
**Disposal by Flushing:** A few medicines have specific instructions to flush them down the sink or toilet when they are no longer needed.





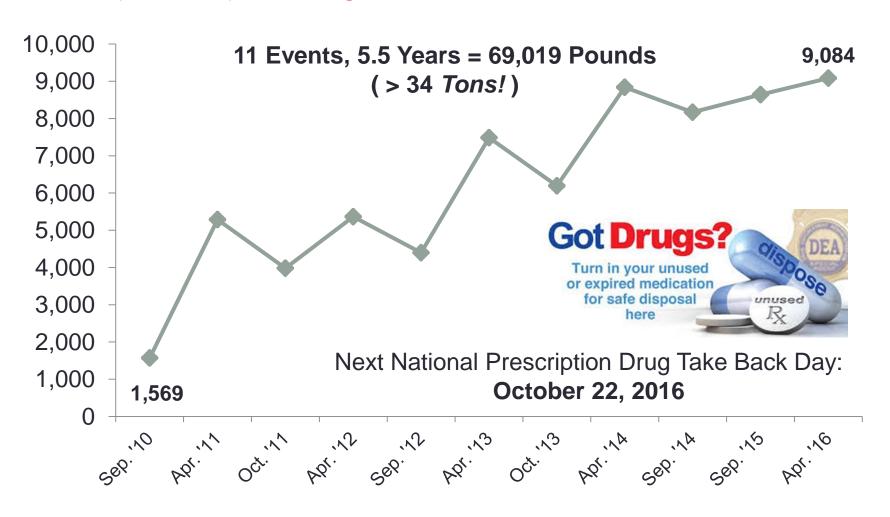
#### U.S. "Take-Back" Initiative

Amount (in Tons) of Rx Drugs Collected



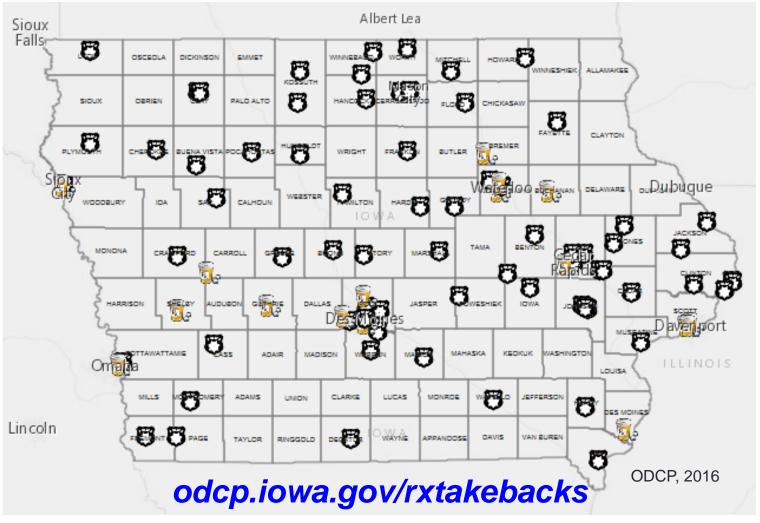
#### Iowa "Take-Back" Initiative

Amount (in Pounds) of Rx Drugs Collected



#### Iowa Permanent Rx "Take Back" Sites

**Controlled Prescription Drugs** 



Sites doubled to 93 vs. year ago & are on pace to double again by January 2017.





# Synthetic Drugs





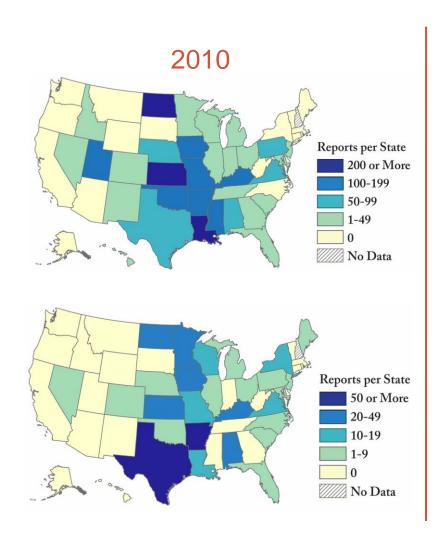


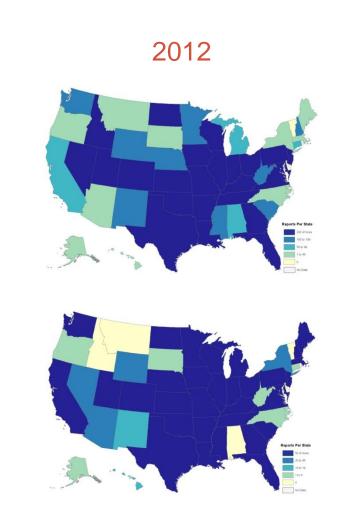


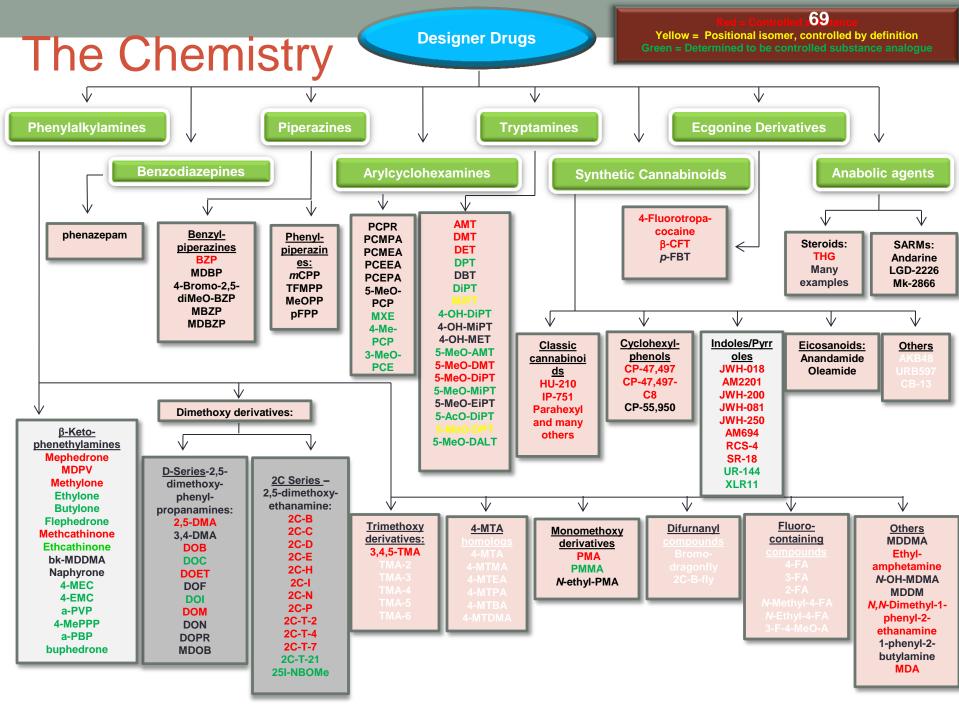


## Synthetic Cannabinoids & Cathinones

Hallucinogens & Stimulants by State







Modified from Wohlfarth and Weinmann, Bioanalysis, 2010

## Synthetic Opioid Alert



#### Dangers of Fentanyl & Fentanyl Analogues/Compounds

Fentanyl is commonly laced in heroin, causing significant problems across the country, particularly as heroin abuse has increased.

Drug incidents & overdoses related to fentanyl are occurring at an alarming rate throughout the U.S. & represent a significant threat to public health & safety.

Often laced in heroin, fentanyl & fentanyl analogues produced in illicit clandestine labs are up to 100 times more powerful than morphine & 30-50 times more powerful than heroin.

## Drug Trends in Iowa: Summary

- Alcohol remains lowa's most abused addictive substance.
- Iowans' appetite for meth remains strong, fed by cartels.
- Marijuana is Iowa's most used illicit substance, & is morphing into new more potent forms.
- Medicine/Opioid abuse is Iowa's fastest growing form of substance abuse...leading to more heroin use too.
- Synthetic drugs are a fast-changing threat to lowa youth.
- With exceptions, lowans generally abuse drugs at rates below many other states...& lowa youth substance abuse is declining. Challenges remain, now & in the future.

#### SHARE THE NEWS & STAY SAFE!

Iowa Governor's Office of Drug Control Policy

Visit Our New Website: <a href="https://odcp.iowa.gov">https://odcp.iowa.gov</a>